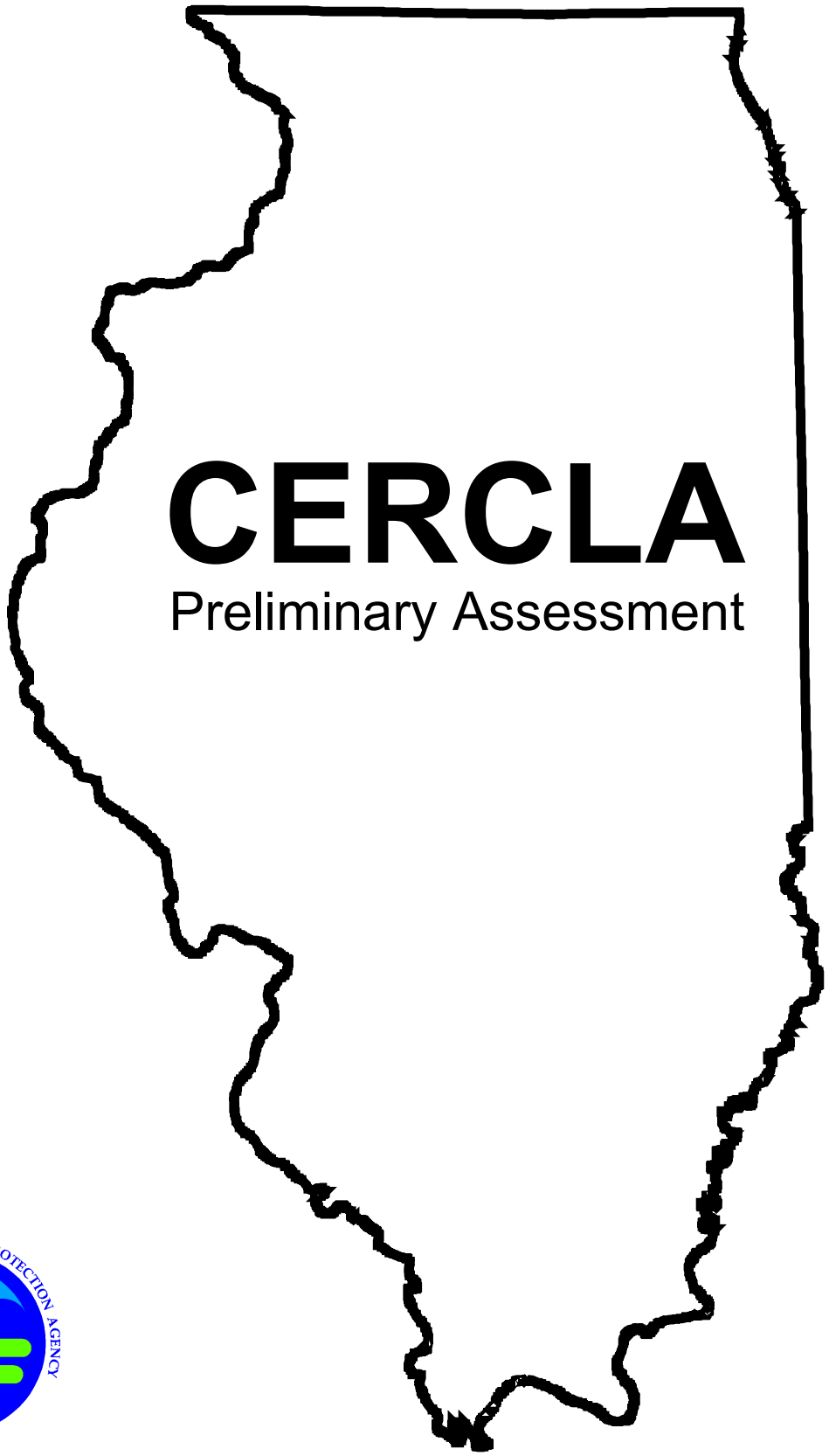
Superior Metals Reclaiming Co.
Lansing, Cook County, Illinois
ILN 000 510 831
Superfund/HRS



CERCLA

Preliminary Assessment

Prepared by:
Office of Site Evaluation
Division of Remediation Management
Bureau of Land

REMEDIAL SITE ASSESSMENT DECISION - EPA REGION V

EPA ID: ILN000510831 **Site Name:** SUPERIOR METALS RECLAIMING COMPANY **State ID:**

Alias Site Names:

City: LANSING

Refer to Report Dated: 2/19/2013 **County or Parish:** COOK **State:** IL

Report Developed By: STATE **Report Type:** PRELIMINARY ASSESSMENT 001

☑ **1. Further Remedial Site Assessment Under CERCLA (Superfund) is not required because:**

☐ **2. Further Assessment Needed Under CERCLA:**

Discussion/Rationale:

The U.S. Environmental Protection Agency (EPA) has determined that no further remedial action by the Federal Superfund program is warranted at the referenced site, at this time. The basis for the no further remedial action planned (NFRAP) determination is provided in the attached document. A NFRAP designation means that no additional remedial steps under the Federal Superfund program will be taken at the site unless new information warranting further Superfund consideration or conditions not previously known to EPA regarding the site are disclosed. In accordance with EPA's decision regarding the tracking of NFRAP sites, the referenced site may be removed from the CERCLIS database and placed in a separate archival database as a historical record if no further Superfund interest is warranted. Archived sites may be returned to the CERCLIS site inventory if new information necessitating further Superfund consideration is discovered.

Site Decision Made by: DAVID BRAUNER, SITE ASSESSMENT MANAGER

Signature: David A. Brauner **Date:** 2/14/13

PRELIMINARY ASSESSMENT

for:

SUPERIOR METALS RECLAIMING COMPANY
LANSING, ILLINOIS
ILN000510831

PREPARED BY:
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF LAND
DIVISION OF REMEDIATION MANAGEMENT
OFFICE OF SITE EVALUATION

January 3, 2013

SIGNATURE PAGE

Title: Preliminary Assessment for Superior Metals Reclaiming Site

Preparer: Gerald E. Willman, Project Manager, Office of Site Evaluation, Illinois Environmental Protection Agency

Signature 2/21/13 Date

Reviewer: Tom Crause, Office Manager, Office of Site Evaluation, Illinois Environmental Protection Agency

Signature 2/21/2013 Date

Approval: David Brauner, United States Environmental Protection Agency, Region 5

Signature 2/19/13 Date

The approval signatures on this page indicate that this document has been authorized for information release to the public through appropriate channels. No other forms or signatures are required to document this information release.

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1.0 Introduction

On February 22, 2012, the Illinois Environmental Protection Agency's (Illinois EPA) Office of Site Evaluation was tasked by the United States Environmental Protection Agency (U.S. EPA) Region V to conduct a Preliminary Assessment at the Superior Metals Reclaiming Company site in Lansing, Cook County, Illinois. The site is located on the southwest corner of the intersection of Chicago Avenue and Pennsylvania Railroad, in Lansing, Cook County, Illinois. The geographic coordinates for the site (at the intersection of Chicago Avenue and Pennsylvania Railroad) are 41.5744° latitude, and -87.5442° longitude. Figure 1 of this report shows the general location of the facility.

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR Part 300) requires that a Preliminary Assessment be performed on all sites entered into the Comprehensive Environmental Response, Compensation, and Liability System (CERCLIS), U.S. EPA's inventory of hazardous waste sites.

A Preliminary Assessment is an early step in the Superfund process that utilizes a limited-scope investigation and collects readily available information. The Preliminary Assessment distinguishes between sites that pose little or no threat to human health and the environment and those that require further investigation. The Preliminary Assessment also supports emergency response and removal activities, fulfills public information needs, and generally furnishes appropriate information about the site early in the assessment process.

If the findings of the Preliminary Assessment determine that further investigation is warranted, the site will continue to progress through the Superfund evaluation process and receive a Site Inspection. The Site Inspection will provide necessary information that will help determine if the site qualifies for possible inclusion on the National Priorities List (NPL) or should be archived and receive a No Further Remedial Action Planned (NFRAP) qualifier. At any time throughout the Superfund evaluation process, the site may be assigned NFRAP status, be referred to another state or federal clean-up program, or recommended for another action. The Preliminary Assessment is performed under the authority of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) commonly known as Superfund.

2.0 Site Background

2.1 Site Description

The Superior Metals Reclaiming Company was located on the Southwest corner of the intersection of Chicago Avenue and Pennsylvania Railroad, in Lansing, Cook County, Illinois. (The railroad tracks are no longer present and the railroad bed has been converted to a bike path). Over the course of Superior Metals Reclaiming Company's operation, it was listed under two physical addresses, and a post office box number. Various editions of the Standard Metals Directory (1946, 1948-1949, and 1954) listed the address of the company as "Chicago Avenue and Pennsylvania Railroad" in Lansing, Illinois. The company address was later listed as 17700

Chicago Avenue in phone directories from 1959 – 1962, which correlates with the southwest corner of the intersection of Chicago Avenue and Pennsylvania Railroad . A 1963 edition of the Standard Metals Directory lists the address as only “P.O. Box 93” in Lansing. The geographic coordinates for the site (at the intersection of Chicago Avenue and Pennsylvania Railroad) are 41.5744° latitude, and -87.5442° longitude. Figure 1 of this report shows the general location of the facility.

Aerial photographs (IDOT) from 1939-1975 were rectified and analyzed using a desktop Geographic Information Systems (GIS) produced by ESRI. Based on the years of operation and building placements, the location of the site was confirmed to be southwest of the intersection of Chicago Avenue and the railroad. A 1957 aerial photograph from IDOT is the first photographic evidence of buildings in this area and can be seen in Figure 2. The 1957 photo shows a parcel approximately one acre in size, buildings, and what appears to be a pile of unconsolidated material (possibly gravel, soil, or waste).

Further analysis of property transactions with the Cook County Recorder of Deeds also verified this location and the site was determined to be a parcel of land approximately one acre to the southwest of the intersection of Chicago Avenue and Pennsylvania Railroad. The property is in the southwest quarter of the southeast quarter of Section 30, Township 36 North, Range 15, and East of the third principal meridian. A map of current site conditions can be seen in Figure 3.

Immediately adjoining to the south and west of the Superior Metals Reclaiming Company site is an area once owned by the Illinois Brick Company. In accordance with aerial photographs from the era, clay was excavated from the property owned by Illinois Brick Company and used in the brick-making process. The pit that remained after the brick company shut down its operations was used to dispose of refuse or other material from the Village of Lansing and in all likelihood, Superior Metals. The 80 acre pit is referred to as the “clay-hole” and was the subject of an article in The Hammond Times from August, 1966. The newspaper article noted that residents nearby the clay-hole were complaining of odors emanating from the hole. The clay-hole was owned and operated by Robert A. Fritz of Lansing, Illinois until 1963 when he gave it to his son, James Fritz. The clay-hole is believed to be located on a separate parcel than Superior Metals and is not addressed in this Preliminary Assessment.

The Pennsylvania Railroad was located adjacent to the site, toward the northeast. A spur track was built off of this railroad and identified in a 1957 aerial photograph (IDOT). The railroad was eventually converted into a bike path. On the northeast side of the railroad bed/bike path is Gus Bock Park and Knights of Columbus Lake. Property to the north of site appears to be commercial and light-industrial. LeBunnies Child Care Learning Center (a daycare and pre-school facility) is located approximately 300 feet south of the site at 17750 S. Chicago Avenue. Large residential subdivisions generally surround the site area, approximately 1000-1500 feet away.

The parcel believed to be occupied by Superior Metals Reclaiming Company is now occupied by American Cast Products, Inc. Beverly Foundry and Precision Machining which has a mailing address of 17730 Chicago Avenue. Remarkably, a separate parcel and building complex immediately to the south known as Techstrand shares the same mailing address: 17730 Chicago Avenue. The former Superior Metals Reclaiming Company property is completely fenced by a combination of large concrete blocks and cyclone metal fence, as well as wooden fence. The property is relatively barren of vegetation and contains several dilapidated vehicles, large metal pieces, and assorted scrap. No evidence of waste from historical smelting activities was identified.

2.2 Site History

Based on advertisements in the Standard Metal directory, Superior Metals Reclaiming Company began operation in approximately 1946 dealing primarily with scrap metals. Later editions of the Standard Metals Directory indicated that the company began smelting various metals and ultimately lead circa 1963. No additional listings after 1963 referenced Superior Metals Reclaiming Company. Sanborn Fire Insurance maps of Lansing, Illinois did not include any information about Superior Metals.

A 10 year lease agreement from May 1, 1945 to April 30, 1955 indicates that a one-acre portion of property was leased to Superior Metals Reclaiming Company from

Robert A. Fritz of Lansing, Illinois. Fritz was owner and operator of a local "clay-hole" that was located on adjoining property to the south and west of the site. The aforementioned lease agreement indicates that Superior Metals Reclaiming Company had the right to dispose of its refuse or other material in this clay-hole. Fritz had also given permission to the Village of Lansing, Illinois to dump village garbage and refuse in the dump/pit. Superior Metals Reclaiming Company had first right to buy the property, or at the end of the lease, had the option to renew the lease for an additional ten years from 1955 to 1965. It is unclear what happened at the end of the first lease agreement; however, Superior Metals Reclaiming Company was still in operation on the site until at least 1963.

The transition of Superior's address from a physical address to a "P.O Box" in late 1962/early 1963 along with no company listing in the 1963 phone directory suggests the company may have shut down operations circa 1963. According to the current owner, American Cast Products, Inc. Beverly Foundry and Precision Machining took ownership of the property in approximately 1975. The property was owned and operated by Oak Lawn Foundry prior to American Cast Products.

2.3 Regulatory Status

Based upon available file information the Superior Metals Reclaiming site does not appear to be subject to Resource Conservation and Recovery Act (RCRA) corrective action authorities. Information currently available does not indicate that the site is under the authority of the Atomic Energy Act (AEA), Uranium Mine Tailings Action

(UMTRCA), or the Federal Insecticide Fungicide or Rodenticide Act (FIFRA). The site does not appear to be regulated under any State or Federal program, voluntary or otherwise.

3.0 Field Inspection Activities

3.1 Field Inspection

Field reconnaissance was conducted in the area of the site on July 5, and August 8, 2012. Several properties surrounding the original address of the facility (the intersection of Chicago Avenue and Pennsylvania Railroad) were inspected and personnel associated with the facilities were interviewed about their operations and knowledge of property history. No piles of slag or related material were identified in the area surrounding the site.

On August 8, and October 15, Illinois EPA Office of Site Evaluation staff conducted X-Ray Fluorescence (XRF) analysis of soils in the area. The August 8 investigation focused on several residential properties in the area. The October 15 investigation was limited to areas on the former Superior Metals Reclaiming facility. The August 8 field-based site characterization was designed primarily to determine if historical operations of Superior metals impacted right-of-ways near the facility and nearby residences. The investigation conducted on October 15 was intended to document conditions on the site itself. Photographs of site conditions are provided in Appendix A of this document.

The residential soil analysis investigation conducted on August 8 by XRF was conducted at nine locations to the southeast and south of the property previously occupied by Superior Metals Reclaiming. Analysis locations were designated alpha-numerically beginning with “XRF” followed by a number. Depths of the soil analysis by XRF ranged from the soil surface to three inches below surface. Geologic material encountered was largely a light brown sandy loam. Small pieces of slag were mixed in with the soil in a low percentage at one location, identified as “XRF 1”, which was conducted in front of the Techstrand facility. Several metals often identified around smelting operations: copper, zinc, cadmium, and lead had their highest concentrations at locations closest to the facility. Location XRF 7, (reading 32) was selected to represent background concentrations for the area. The location was selected to represent background because it was away from apparent industrial activities and concentrations of metals were low in comparison to other locations. Table 1 of this report contains the XRF results and Figure 3 shows the analysis locations.

The October 15 on-site soil analysis investigation included 16 XRF locations conducted on the soil surface. Locations were identified alpha-numerically and continued the numbering system for the residential analysis. The materials encountered at on-site XRF locations was largely black foundry sand and to a lesser degree, black sandy loam. Eight metals were identified on-site at concentrations greater than three-times background. Copper, zinc, and lead were at concentrations greater than three-times background in every location. Copper concentrations

ranged from 342 – 2389 ppm, zinc concentrations ranged from 680 – 8,987 ppm, and concentrations of lead ranged from 156 – 1,225 ppm. Table 1 of this report contains the XRF results for the on-site analysis. The locations where XRF analysis was conducted on soil are included on Figure 3 of this report.

4.0 Pathway Discussions

4.1 Groundwater

No groundwater samples were collected during the Pre-CERCLIS Screening Assessment or the Preliminary Assessment. The Village of Lansing buys its water from the city of Hammond, Indiana, who utilizes Lake Michigan as its water source. According to Village officials, residents and industry within the Village receive public water supply.

A review of an internal Oracle database maintained by the Illinois State Geological Survey identified groundwater wells located near the investigative area. Although everyone in the village is reportedly on a municipal water supply system, the most recent data available from ISGS indicates that there are 15 private wells within one mile of the site. There are several different types of private wells in the database maintained by ISGS, differentiated by use. Four of the 15 wells within one mile of the site were not designed for drinking water purposes. An additional well belongs to the Village and is not currently used for drinking water purposes. The nearest private well to the site is located approximately 2,500 feet towards the southeast.

4.2 Surface Water

There is no surface water located on the property that formerly housed Superior Metals Reclaiming. The site and surrounding area is flat with no discernable preferential pathways for surface water run-off. Storm water control systems in association with 178th Street to the south, and 175th Street to north would control any run-off in those directions. Any run-off that might occur towards the east would be intercepted by ditches along the railroad that also feed into the Village's storm water control system.

4.3 Soil Exposure

The property formerly occupied by Superior Metals Reclaiming was fenced. The nearest permanent residential property is located off-site, approximately 180 feet to the southeast of the property. LeBunnies Child Care Learning Center (a daycare and pre-school facility) is located approximately 300 feet south of the site at 17750 S. Chicago Avenue. Large residential subdivisions generally surround the site area, approximately 1000-1500 feet away. Soil analysis by XRF was conducted at nine off-site locations in right-of-ways to the southeast and south of the property believed to be previously occupied by Superior Metals Reclaiming. At off-site locations, metals were identified in concentrations greater than three times background in six of nine locations. Four metals, copper, zinc, cadmium, and lead were identified during the investigation at concentrations greater than three times background. Copper was identified at concentrations greater than three-times background in two off-site locations. Zinc was identified at concentrations greater than three-times

background in six off-site locations. Cadmium and Lead were identified (separately) at concentrations greater than three-times background in one off-site location. Only one location had slag present in the soil, so based on information currently available, it appears that elevated concentrations off site were due to aerial deposition, rather than residents or city workers using slag materials for fill or surface gravel.

Soil analysis by XRF was conducted at 16 on-site locations. All 16 locations had concentrations of at least one metal present at three-times background concentrations. Eight (8) metals (chromium, manganese, copper, zinc, arsenic, selenium, mercury, and lead) were identified on-site at concentrations greater than three-times background. Copper, zinc, and lead were present at concentrations greater than three-times background in all 16 on-site locations. Access to the on-site soils is restricted by fencing surrounding the entire property.

Census data has been compiled and formatted for use in GIS applications by ESRI, a GIS software company. ESRI used demographic data from the “Census 2000 Summary File” represented by Census Block Centroids to generate data that can be overlain onto maps for analysis (ESRI). In order to calculate population in areas surrounding the site, the ESRI census data was overlain onto a map from the region and queried based on distance from the site’s boundary (Illinois EPA, GIS). Population data based on GIS analysis for areas surrounding the site is shown below. A total of 14,999 people are estimated to reside within one mile of the site

(U.S. DOC; Illinois EPA, GIS). Figure 4 shows the site along with the 4-mile distance rings.

Population within four miles of the site

Distance (mi)	Population [1]
On-Site	0
0 – ¼ mile	558
¼ - ½ mile	3592
½ - 1 mile	10849
1 mile – 2 miles	33256
2 miles – 3 miles	47833
3 miles – 4 miles	73875

1. Source: United States Department of Commerce, Economics and Statistics Administration, Bureau of Census; Illinois EPA, GIS.

4.4 Air Route

A portion of the site lacks vegetative cover. The lack of vegetation may enable particulate material to become suspended in the air during dry periods.

No data has been collected during previous investigations that support the air pathway.

5.0 Summary

The Superior Metals Reclaiming Company was located on the Southwest corner of the intersection of Chicago Avenue and Pennsylvania Railroad, in Lansing, Cook County, Illinois. The company was in operation from approximately 1945 – 1963. The company began its operations on a one acre parcel located on the bank of an old clay pit associated with the Illinois Brick Company. A 1957 photo shows the one-acre parcel, buildings, and what appears to be a pile of unconsolidated material (possibly gravel, soil, or waste) near the banks of the clay pit.

The properties adjacent to the facility are primarily industrial and commercial; however, large residential areas are prevalent within 1000-1500 feet of the facility. A daycare and pre-school facility is located approximately 300 feet south of the site. The former Superior Metals property is currently fenced. A foundry and precision machining business is currently located at the property that formerly housed Superior Metals Reclaiming. No evidence of waste from historical smelting activities was identified during site visits.

Soil analysis by XRF conducted on-site within facility boundaries identified copper, zinc, and lead in all 16 locations at concentrations greater than three times background. Off-site XRF analysis conducted in right-of ways located south and southwest of the facility identified four metals: copper, zinc, cadmium, and lead at concentrations greater than three times background. Zinc was identified most often in off-site locations at concentrations greater than three times background, in six of nine locations. Lead was only identified at concentrations greater than three times background in one off-site location.

The primary pathway of concern is the soil exposure pathway. Approximately 15,000 people live within one mile of the site. Residents living in close proximity to the former facility's location, along with a day care nearby contribute to the concern regarding off-site soil contamination. However, results from off-site XRF analysis indicate that migration of contaminants from historical smelting activities into

residential areas is not significant. With the exception of cadmium, which occurred in the right-of-way adjacent to an industrial property, metal concentrations found off-site meet Illinois EPA's Corrective Action Objectives for residential exposure scenarios.

6.0 References

ESRI. ESRI Data & Maps 2002, An ESRI White Paper. Electronic Report at http://support.esri.com/index.cfm?fa=knowledgebase.whitepapers.viewPaper&PID=16&MetaID=1292. Accessed December 2007.

Illinois State Geological Survey. Oracle Well and Boring Database. Geologic Records Unit. Illinois State Geological Survey. Champaign, Illinois. Accessed May 2008.

United States Department of Commerce, Economics and Statistics Administration, Bureau of Census. Census 2000: Summary File 1. In: ESRI Data & Maps 2006 Data Update, http://www.esri.com/data/data-maps/overview.html. Accessed July, 2007

United States Environmental Protection Agency. Hazard Ranking System Guidance Manual. Office of Solid Waste and Emergency Response. EPA 540-R-92-026. Document No. PB92963377. November 1992.

Figures

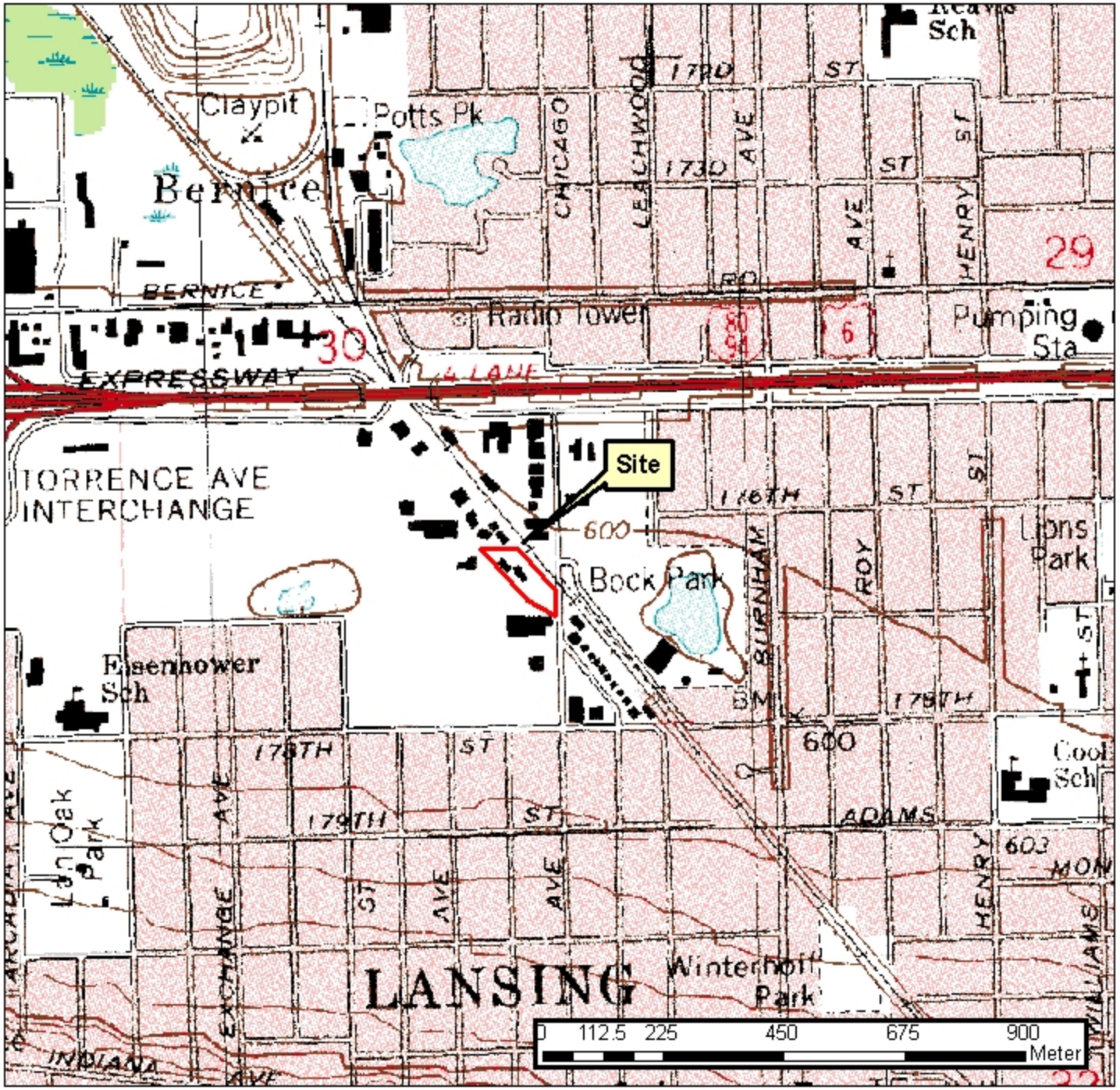


Figure 1

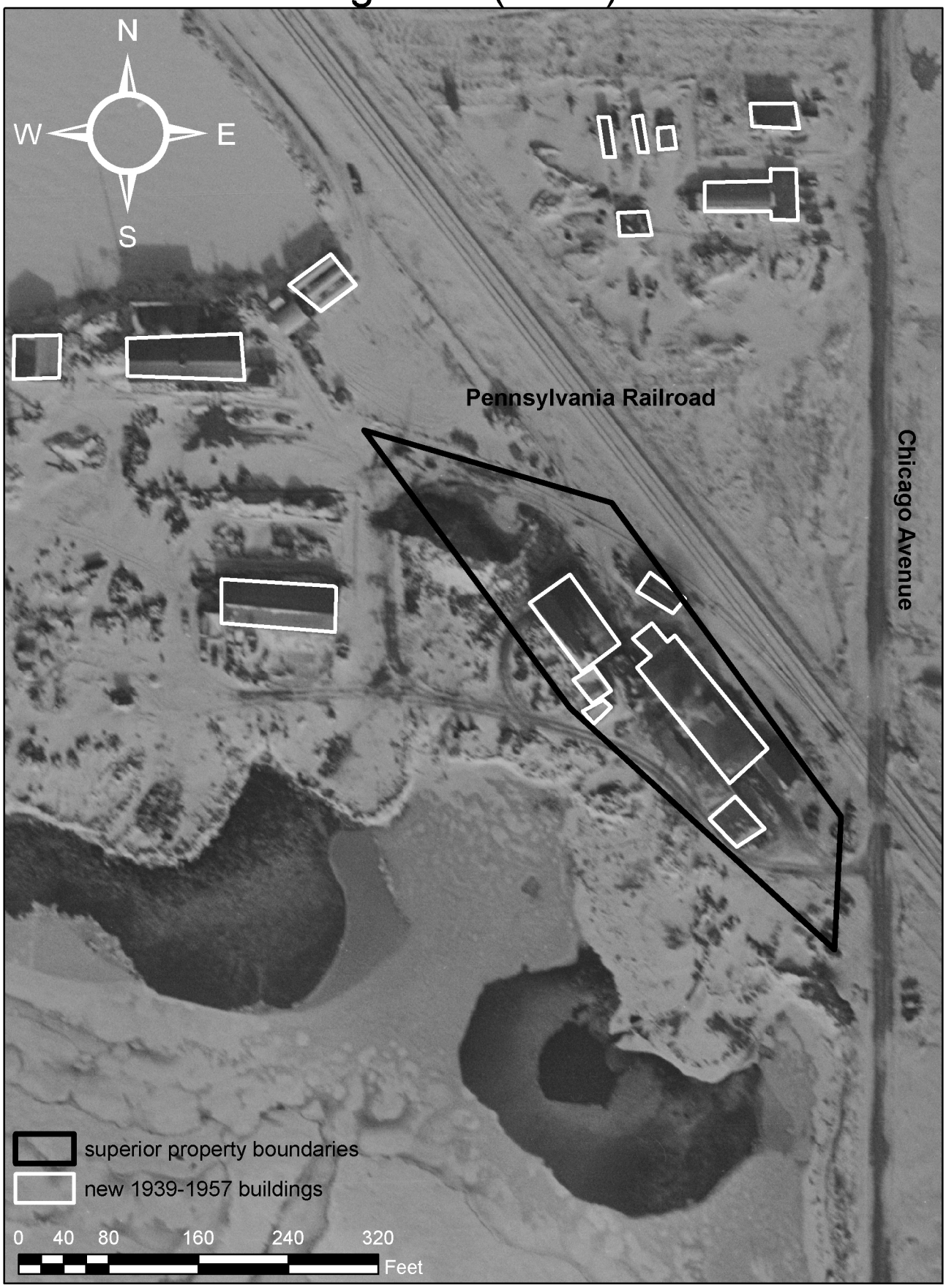
Superior Metals Reclaiming

Site Location Map

N

Source: USGS; Topographical Map as SDE, Illinois EPA GIS Database; Accessed September 2012

Superior Metals Reclaiming Company
Figure 2 (1957)



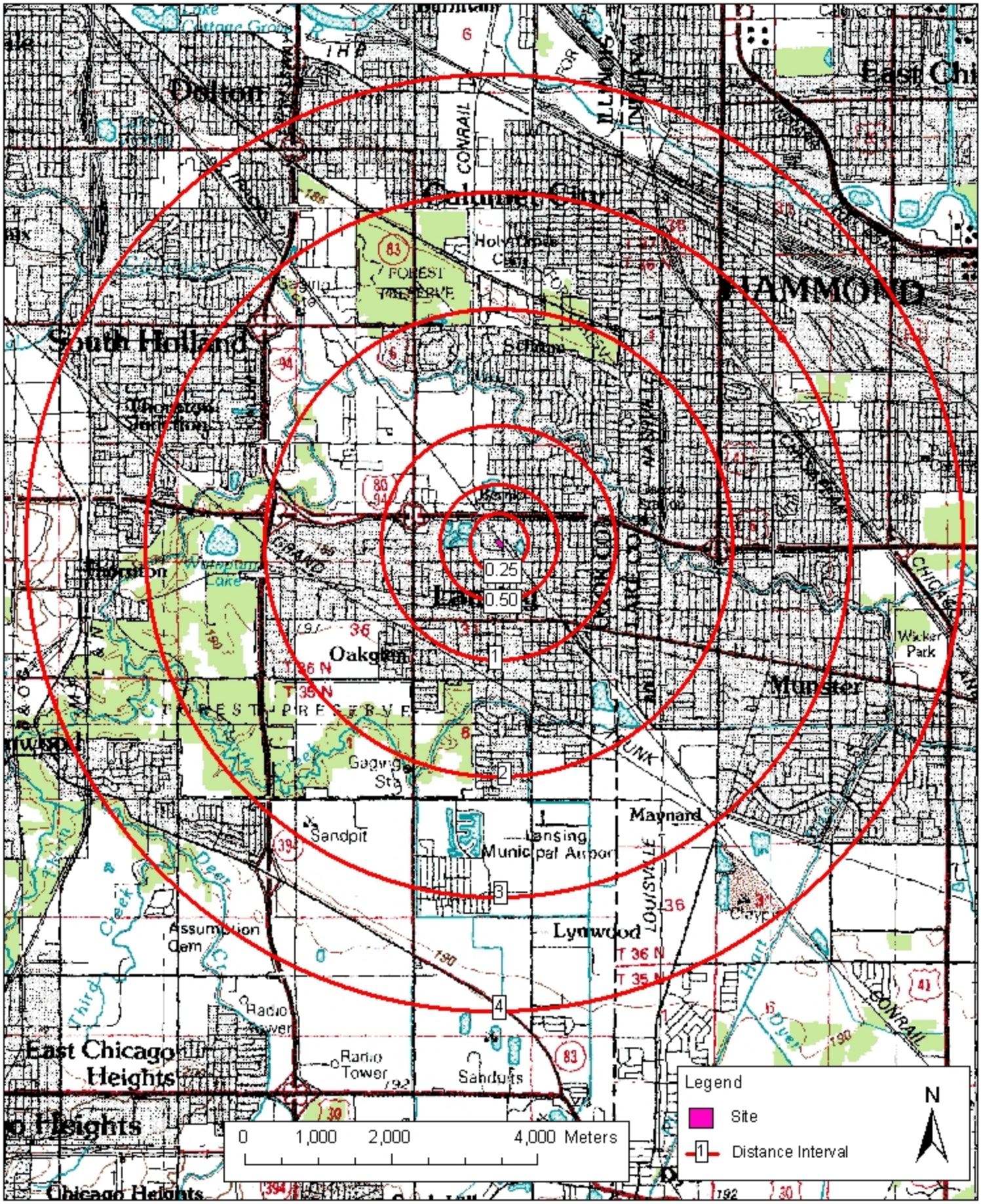
Photograph courtesy of IDOT

FIGURE 3

Superior Metals Reclaming
Aerial Photo with XRF Analysis Locations

Figure 4

Superior Metals Reclaiming Company
4-Mile Radius Map



Tables

Table 1
X-Ray Flourescence Analysis of Subsurface Soils

			Metal Concentrations in Parts Per Million																															
			Cr		Mn		Co		Ni		Cu		Zn		As		Se		Ag		Cd		Sb		Ba		Hg		Pb	
	Residential Benchmarks [1]		230		3700		4700		1600		2900		23000		11.3		390		390		78		31		5500		10		400	
XRF Location Number	Date	Depth in Inches																																
1	8/8/2012	Surface	<	135		559	<	199	<	70		**230**		**724**	<	20	<	6	<	55		106	<	132	<	363	<	18		88
1	8/8/2012	2	<	161		533		254	<	73		**135**		**757**	<	21	<	6	<	58		121	<	142	<	416	<	17		101
1	8/8/2012	3	<	177		576		281	<	74		**252**		**1203**	<	27	<	6	<	54		108	<	134	<	392	<	17		**214**
2	8/8/2012	Surface	<	173		546	<	205	<	67		**185**		**668**	<	19	<	5	<	58		136	<	141	<	425	<	17		84
2	8/8/2012	1	<	172		653	<	199	<	74		90		**625**	<	14	<	5	<	57		**375**	<	144	<	388	<	16		27
3	8/8/2012	Surface	<	148		387		219	<	71		47		**475**	<	19	<	5	<	53	<	68	<	127	<	378	<	16		113
3	8/8/2012	1	<	170		373	<	229	<	70		88		**370**	<	21	<	6	<	60	<	77	<	144	<	439	<	16		98
4	8/8/2012	Surface	<	181		286		345	<	77		95		**377**	<	20	<	6	<	59	<	76	<	146	<	412	<	17		81
4	8/8/2012	1	<	150		274	<	220	<	75		90		**321**	<	19	<	5	<	59	<	75	<	144	<	423	<	19		79
5	8/8/2012	Surface	<	155		404		428	<	69		57		**326**	<	19	<	5	<	54	<	69	<	130	<	410	<	16		92
5	8/8/2012	1		231		257	<	231	<	73	<	39		238	<	19	<	5	<	57	<	73	<	139	<	436	<	15		95
6	8/8/2012	Surface	<	142		463		379	<	76		56		**304**	<	19	<	5	<	55	<	72	<	139	<	435	<	14		87
6	8/8/2012	1	<	173		339	<	254	<	82	<	43		198	<	18	<	6	<	59	<	75	<	144	<	454	<	16		55
6	8/8/2012	2	<	180		599		448	<	77		48		213	<	18	<	5	<	60	<	78	<	145	<	492	<	17		71
7	8/8/2012	Surface	<	152		353		295	<	66	<	39		87	<	15	<	5	<	58	<	74	<	140	<	384	<	13		41
7	8/8/2012	1	<	159		299		312	<	77	<	40		77	<	14	<	7	<	58	<	74	<	142	<	455	<	18		44
7	8/8/2012	2	<	128		313		361	<	67	<	32		89	<	13	<	5	<	52	<	66	<	128	<	384	<	15		36
8	8/8/2012	Surface	<	149		195	<	222	<	69	<	39		88	<	14	<	5	<	58	<	75	<	141	<	409	<	15		29
8	8/8/2012	1.5	<	309	<	368	<	529	<	168	<	85	<	59	<	37	<	14	<	136	<	175	<	335	<	1026	<	23		52
9	8/8/2012	Surface	<	131		452		282	<	65	<	37		113	<	13	<	5	<	53	<	67	<	124	<	333	<	17		32
9	8/8/2012	2	<	137		693		331	<	74	<	35		87		13	<	6	<	55	<	70	<	133	<	415	<	15		18
10	10/15/2012	Surface		435.7		320.6	<	95.9	<	75.3		**342.1**		**851**	<	16.9		11.7		NA		NA		NA		NA		28.9		**172**
11	10/15/2012	Surface		542		**3604**	<	268		324		**1886**		**6657**	<	**55.1**	<	**18.9**		NA		NA		NA		NA		**54.6**		**927**
12	10/15/2012	Surface		388.1		**3754**	<	230		381		**2287**		**8727**		**79.9**		**20.6**		NA		NA		NA		NA		**51.8**		**1225**
13	10/15/2012	Surface	<	138.7	<	135.8	<	106		114		**2389**		**1905**	<	30.1	<	10.4		NA		NA		NA		NA		17		**582**
14	10/15/2012	Surface	<	108.5	<	102.4	<	87.7	<	60.5		**1124**		**2077**	<	17.6	<	8.04		NA		NA		NA		NA		13.3		**269**
15	10/15/2012	Surface	<	168.4		676.4	<	140		231		**503.6**		**2247**	<	20.1	<	12.1		NA		NA		NA		NA		**39.6**		**198**
16	10/15/2012	Surface		229.3		549.8	<	139		169		**1236**		**4226**	<	25.3	<	11.2		NA		NA		NA		NA		44		**398**
17	10/15/2012	Surface		229.7		501.4	<	142		157		**1446**		**8860**	<	26.9	<	10		NA		NA		NA		NA		18.7		**540**
18	10/15/2012	Surface	<	230		420	<	164	<	121		**1307**		**1113**	<	30.5	<	16.7		NA		NA		NA		NA		22.2		**206**
19	10/15/2012	Surface		188.1		764.6	<	140		128		**869.9**		**2781**		25.9	<	9.83		NA		NA		NA		NA		12.3		**462**
20	10/15/2012	Surface		173.1		334.9	<	116		131		**678.1**		**2708**	<	19.8		13.5		NA		NA		NA		NA		26.1		**191**
21	10/15/2012	Surface		217.7		650.6	<	116		171		**1138**		**8987**	<	23		13.1		NA		NA		NA		NA		32.1		**345**
22	10/15/2012	Surface	<	170.5		646.9	<	134		149		**1547**		**6533**	<	31.4		**16.2**		NA		NA		NA		NA		18.7		**516**
23	10/15/2012	Surface		**624.3**		411.7	<	192		147		**1331**		**6062**	<	29.6	<	13.2		NA		NA		NA		NA		28.5		**396**
24	10/15/2012	Surface	<	176.8		475.7	<	145		110		**483**		**3632**	<	20.7	<	12.5		NA		NA		NA		NA		19.5		**156**
25	10/15/2012	Surface	<	122.2		311	<	110	<	64.9		**405.3**		**680**	<	21.9	<	8.26		NA		NA		NA		NA	<	9.93		**382**

Residential Benchmarks are residential corrective action objectives for soil exposure (lowest of injestion or inhalation) from Illinois Administrative Code Part 742.

XRF Location #7 (surface) selected as background, based on results and geology

624.3 Concentration is 3x background

Appendix A
Illinois EPA Site Photographs

SITE NAME: Superior Metals Reclaiming Company	
CERCLIS ID: ILN000510831	COUNTY: Cook

DATE: 10/15/12
TIME: 12:00PM
PHOTO BY: J. Willman
DIRECTION: NW
COMMENTS: Walkway to the west of main buildings

DATE: 10/15/12
TIME: 12:01PM
PHOTO BY: J. Willman
DIRECTION: N
COMMENTS: Standing to the north of main building

SITE NAME: Superior Metals Reclaiming Company

CERCLIS ID: ILN000510831	COUNTY: Cook

DATE: 10/15/12
TIME: 12:02PM
PHOTO BY: J. Willman
DIRECTION: ENE
COMMENTS: Standing on concrete pad northwest of main buidlings

DATE: 10/15/12
TIME: 12:03PM
PHOTO BY: J. Willman
DIRECTION: N
COMMENTS: North of main buildings

SITE NAME: Superior Metals Reclaiming Company	
CERCLIS ID: ILN000510831	COUNTY: Cook

DATE: 10/15/12
TIME: 12:04PM
PHOTO BY: J. Willman
DIRECTION: SSE
COMMENTS: Standing north of main buildings

DATE: 10/15/12
TIME: 12:05PM
PHOTO BY: J. Willman
DIRECTION: E
COMMENTS: Standing north of main buildings

SITE NAME: Superior Metals Reclaiming Company

CERCLIS ID: ILN000510831	COUNTY: Cook

DATE: 10/15/12
TIME: 12:06PM
PHOTO BY: J. Willman
DIRECTION: W
COMMENTS:
View of western border of property

DATE: 10/15/12
TIME: 12:07PM
PHOTO BY: J. Willman
DIRECTION: N
COMMENTS:
North portion of property

SITE NAME: Superior Metals Reclaiming Company	
CERCLIS ID: ILN000510831	COUNTY: Cook

DATE: 10/15/12
TIME: 12:08PM
PHOTO BY: J. Willman
DIRECTION: SSE
COMMENTS: Standing in north portion of property

DATE:
TIME:
PHOTO BY:
DIRECTION:
COMMENTS:

SITE NAME: